

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Original) A microstrip coupler, comprising:

a first microstrip conductor configured to carry an input signal;
a second microstrip conductor disposed along a first side of the first microstrip conductor and configured to couple at least a portion of the input signal;

a third microstrip conductor disposed along a second side of the first microstrip conductor and configured to couple at least a portion of the input signal;

a first controlled capacitance bridge connecting the second microstrip conductor and the third microstrip conductor, the controlled capacitance bridge comprising:

a conducting layer; and
a dielectric layer situated between the conducting layer and the first microstrip conductor.

2. (Original) The apparatus of claim 1, further comprising a second controlled capacitance bridge connecting the second microstrip conductor and the third microstrip conductor.

3. (Original) The apparatus of claim 1, wherein the input signal has even and odd modes and wherein the controlled capacitance bridge is configured to compensate for a difference in velocity between the even and odd modes.

4. (Original) The apparatus of claim 1, wherein the conducting layer comprises a metallized layer disposed along a first side of the dielectric layer, and wherein a capacitance is formed between the metallized layer and the first microstrip conductor.

5. (Original) The apparatus of claim 1, wherein the input signal has even and odd modes and wherein a width of a portion of the first microstrip conductor proximate the controlled capacitance bridge is configured to compensate for a difference in velocity between the even and odd modes.

6. (Original) A controlled capacitance bridge for connecting a first microstrip conductor and a second microstrip conductor of a microstrip coupler, wherein the first microstrip conductor is disposed along a first side of a third microstrip conductor configured to carry an input signal and the second microstrip conductor is disposed along a second side of the third microstrip conductor, the controlled capacitance bridge comprising:

a conducting layer; and

a dielectric layer situated between the conducting layer and the third microstrip coupler.

7. (Original) The apparatus of claim 6, wherein the input signal has even and odd modes and wherein the controlled capacitance bridge is configured to compensate for a difference in velocity between the even and odd modes.

8. (Original) The apparatus of claim 6, wherein the conducting layer comprises a metallized layer disposed along a first side of the dielectric layer, and wherein a capacitance is formed between the metallized layer and the first microstrip conductor.

9. (Original) The apparatus of claim 7, wherein a width of the conducting layer is selected to compensate for the difference in velocity between the even and odd modes.

10. (Original) The apparatus of claim 7, wherein a thickness of the dielectric layer is selected to compensate for the difference in velocity between the even and odd modes.

11. (cancelled)

12. (Currently Amended) A a first controlled capacitance bridge for connecting the input microstrip conductor and the central microstrip conductor, the first controlled capacitance bridge comprising:

a first conducting layer; and

a first dielectric situated between the first conducting layer and the first gap; and

a second controlled capacitance bridge for connecting the central microstrip conductor and the output microstrip conductor, the second controlled capacitance bridge comprising:

a second conducting layer, and

a second dielectric situated between the second conducting layer and the second gap.

13. (Original) The microstrip coupler of claim 11, wherein the coupling microstrip conductor comprises:

a first coupled portion disposed along a first side of the central microstrip conductor;

a second coupled portion disposed along a second side of the central microstrip conductor;

a first connecting portion extending through the first gap and beneath the first controlled capacitance bridge for connecting a first end of the first coupled portion and a first end of the second coupled portion; and

a second connecting portion extending through the second gap and beneath the second controlled capacitance bridge for connecting a second end of the first coupled portion and a second end of the second coupled portion.

Amendments to the Drawings:

The attached sheets of formal drawings includes redrawn replacement figs. 1-5. Pending the Examiner's approval of the enclosed drawings with the proposed change marked in red ink, these sheets of formal drawings replace original sheets including figs. 1-5, that are also included.

attachment: replacement sheet